15

20

and

5

## WHAT IS CLAIMED IS:

- 1. A method for detecting errors in GPS accuracy, comprising:
  determining an initial GPS position of a marker;
  receiving GPS signals at the marker;
  calculating, from the GPS signals, a GPS coordinate position of the marker;
  comparing the GPS coordinate position and the initial GPS position; and
  issuing a warning if the GPS coordinate position differs from the initial GPS
- 2. The method of claim 1, said determining further comprises obtaining coordinates from a site survey.

position by more than a predetermined amount.

- 3. The method of claim 1, said determining further comprising: receiving GPS signals at the marker; obtaining a single sample of the GPS signals; and calculating a single GPS position from the single sample of the GPS signals; setting said initial GPS position at the single GPS position.
- 4. The method of claim 1, said determining further comprising: calculating a plurality of GPS positions for the marker over a period of time; statistically analyzing the plurality of GPS positions; and setting said initial GPS position based on a result of said analyzing.
- 5. The method of claim 4, said analyzing comprising taking an average of at least some of the plurality of GPS positions.

- 6. The method of claim 4, said analyzing including disregarding aberrant ones of the plurality of GPS positions.
- 7. The method of claim 1, further comprising issuing a warning if there are insufficient GPS signals to perform said calculating.
  - 8. The method of claim 1, further comprising: identifying, in response to said issuing, a source of local interference; and neutralizing the source of local interference.

10

- 9. A system for detecting local interference in GPS signals, comprising:
- a GPS receiver capable of determining its GPS coordinates;
- a memory capable of storing an initial location of said GPS receiver and a user-defined range of error;

15

a processor being programmed to determine whether GPS coordinates from said GPS receiver differ from said initial location by more than a range of error, and for issuing a warning in response thereto.

10. The system of claim 9, further comprising:

20

a remote unit including said GPS receiver, said memory, said processor, and a transmitter capable of sending said warning; and

a monitoring unit including a receiver capable of receiving said warning and a display capable of displaying information relating to said warning.

25

11. The system of claim 9, further comprising:

a plurality of remote units, each including said GPS receiver, said memory, said processor, and a transmitter capable of sending said warning; and

a monitoring unit including a receiver capable of receiving said warning from each of said plurality of remote units, and a display capable of displaying information relating to said warning;

wherein said plurality of remote units collectively provide local interference detection over an area.